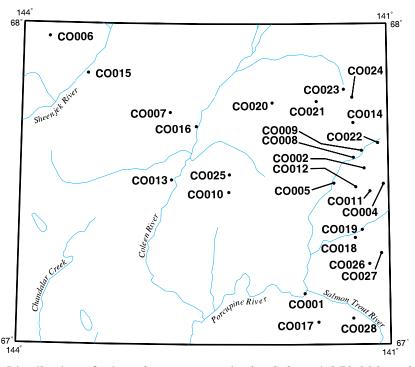
U.S. Department of the Interior - U.S. Geological Survey

Coleen quadrangle

Descriptions of the mineral occurrences shown on the accompanying figure follow. See U.S. Geological Survey (1996) for a description of the information content of each field in the records. The data presented here are maintained as part of a statewide database on mines, prospects and mineral occurrences throughout Alaska.



Distribution of mineral occurrences in the Coleen 1:250,000-scale quadrangle, northeastern Alaska

This and related reports are accessible through the USGS World Wide Web site http://www-mrs-ak.wr.usgs.gov/ardf. Comments or information regarding corrections or missing data, or requests for digital retrievals should be directed to the author(s) of this compilation:

James Dover U.S. Geological Survey 4200 University Drive Anchorage, AK 99508-4667 Voice: (907) 786-7419 e-mail: jdover@usgs.gov





This report is preliminary and has not been reviewed for conformity with U.S. Geological Survey editorial standards or with the North American Stratigraphic code. Any use of trade, product, or firm names is for descriptive purposes only and does not imply endorsement by the U.S. Government.



Site: Porcupine River; Old Rampart

Type: Occurrence

ARDF no. CO001

Latitude: 67.15 Quadrangle: CO A-2

Longitude: 141.69

Location description and accuracy:

Located along west bank of Porcupine River opposite mouth of Salmon Trout River, near Old Rampart; locality recorded here is from Cobb (1972) and locality 15 of Barker and Clautice (1978, p. 14), which varies slightly from Barker (1978, 1981); located to within 3000 ft (914 m).

Commodities:

Main: Ni Other: Cu, Pb, V, Zn

Ore minerals: Nickeliferous alum

Gangue minerals:

Geologic description:

Nickeliferous alum collected from a seep on the bank of Porcupine River. May indicate high Ni content in nearby gabbro/diorite or Middle Devonian sedimentary rocks. Rock samples of iron stained limestone and shales have anomalous copper (up to 500 ppm), lead (500 ppm), and zinc (2000 ppm), as well as vanadium and nickel (Barker, 1981, p. 50, no. 4; Barker and Clautice, 1978, p. 19, no. 15).

Alteration:

Workings/Exploration:

Age:

Deposit model:

Seep

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

See MAS/MILS Sequence # 0020330002 (USBM, 1995)

References:

Cobb, 1972, MF-403; White, 1952; Barker, 1978; Barker, 1981; Barker and Clautice, 1978; USBM, 1995

Primary reference: Barker and Clautice, 1978

Reporter: M.T. Powers; D.F. Huber; J.M. Schmidt; J.H. Dover

Alaska Resour	Alaska Resource Data File P	
	Reporter affiliation: USGS	
	Last report date: 9/12/96	

Site: Rapid River tributary

Type: Occurrence

ARDF no. CO002

Latitude: 67.55 Quadrangle: CO C-1

Longitude: 141.2

Location description and accuracy:

Located about 2 mi (3.2 km) SW of VABM Orphan near fork in unnamed NW flowing tributary of Rapid River; located to within 1500 ft (457 m).

Commodities:

Main: U Other:

Ore minerals: Unspecified Uranium mineral

Gangue minerals: Rutile

Geologic description:

Uranium-bearing mineral in heavy-mineral concentrate of stream gravel tentatively identified as altered rutile based on incomplete spectrographic analysis; optical properties resembled those of eschynite (White, 1952, p. 8).

Alteration:

Workings/Exploration:

.052% eU in heavy mineral fraction at a concentration ratio of 2700:1 (White, 1952, p. 8, field no. 48Awe117).

Age:

Deposit model:

Placer; stream

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

See MAS/MILS Sequence # 0020330003 (USBM, 1995)

References

Cobb, 1972, MF-403; White, 1952

Primary reference: White, 1952

Reporter: M.T. Powers; D.F. Huber; J.M. Schmidt; J.H. Dover

Reporter affiliation: USGS

Site: Sunaghun Creek Tributary

Type: Occurrence

ARDF no. CO003

Latitude: 67.5 Quadrangle: CO C-1

Longitude: 141.09

Location description and accuracy:

Located about 1.5 mi (2.4 km) up northwest tributary in headwaters of Sunaghun Creek; located to within 1 mi (1.6 km).

Commodities:

Main: U Other:

Ore minerals: Unknown uranium-bearing mineral

Gangue minerals:

Geologic description:

Black, opaque, U-bearing mineral having Fe, Mn, Al and Si as major contituents; heavy mineral concentrate from stream gravels in area of slightly radioactive granitic and rhyolitic rocks has .010% eU content and 1000:1 concentration ratio (White, 1952, p. 8, field no. 48Awe108)

Alteration:

Workings/Exploration:

Age:

Deposit model:

Placer; stream

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Not considered a commercial source of uranium

Additional comments:

See MAS/MILS Sequence # 0020330004 (USBM,1995)

References:

Cobb, 1972, MF-403; White, 1952

Primary reference: White, 1952

Reporter: M.T. Powers; D.F. Huber; J.M. Schmidt; J.H. Dover

Reporter affiliation: USGS

Site: Sunaghun Creek Confluence

Type: Occurrence

ARDF no. CO004

Latitude: 67.492 Quadrangle: CO C-1

Longitude: 141.042

Location description and accuracy:

Located at confluence of Sunaghun Creek and northwest tributary in headwaters area of Sunaghun Creek; located to within 1000 ft (305 m).

Commodities:

Main: U Other:

Ore minerals: Clarkeite(?)

Gangue minerals:

Geologic description:

Reddish-brown uraniferous grains occur in heavy mineral concentrate from stream gravels in area of slightly radioactive granitic and rhyolitic rocks; concentrate has .045% eU content and 3500:1 concentration ratio (White, 1952, p. 8, field no. 48Awe89).

Alteration:

Workings/Exploration:

Age:

Deposit model:

Placer, stream

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

Not considered a commercial source of uranium

References:

Cobb, 1972, MF-403; White, 1952

Primary reference: White, 1952

Reporter: M.T. Powers; D.F. Huber; J.M. Schmidt; J.H. Dover

Reporter affiliation: USGS

Site: Sunaghun Creek

Type: Occurrence

ARDF no. CO005

Latitude: 67.51 Quadrangle: CO C-1

Longitude: 141.023

Location description and accuracy:

Located about 1 mi (1.6 km) upstream from confluence with northwest tributary in headwaters area of Sunaghun Creek, and about 0.5 mi (0.8 km) from Yukon border; located to within 1000 ft (305 m).

Commodities:

Main: U Other:

Ore minerals: Unknown radioactive minerals

Gangue minerals: Hematite, pyrite

Geologic description:

Analyses of three samples from three nearby localities are reported by White (1952, p. 8-9):

- 1. Sample no. 48AWe90 is heavy mineral concentrate from stream gravels and contains an altered unknown uraniferous mineral containing Fe, Ti, Al, and Si, and 0.016% eU at 8200:1 concentration ratio;
- 2. Sample no.48AWe99 is heavy mineral concentrate from disintegrated rhyolitic dike and contains unknown orange and translucent Ca- and P-bearing uraniferous mineral with dull luster, and 0.060% eU at 2000:1 concentration ratio; also contains hematite with uraniferous impurity;
- 3. Sample no. 48AWe100 is from crushed fragments of fresh rock at same locality as sample no. 48AWe99, and contains minute radioactive particles on weathered surfaces and altered fractures in euhedral pyrite, and 0.030% eU at 450:1 concentration ratio.

Alteration:

Workings/Exploration:

Age:

Deposit model:

Lode

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

Not considered a commercial source of uranium

References:

Cobb, 1972, MF-403; White, 1952

Primary reference: White, 1952

Reporter: M.T. Powers; D.F. Huber; J.M. Schmidt; J.H. Dover

Reporter affiliation: USGS

Site: Shoulder Mountain

Type: Occurrence

ARDF no. CO006

Latitude: 67.96 Quadrangle: CO D-5

Longitude: 143.79

Location description and accuracy:

Located about 10 mi (16 km) northwest of Shoulder Mountain, between Koness River and Monument Creek, and about 5 mi (8 km) from Arctic National Wildlife Refuge; locality recorded here is from Brosge and Reiser (1968), which varies somewhat from locality 29 of Barker (1978) and locality 2 of Barker (1981); located to within 3 mi (4.8 km).

Commodities:

Main: Ba Other:

Ore minerals: Barite

Gangue minerals:

Geologic description:

Beds or lenses of massive barite, the largest being about 20 ft (6.1 m) thick and at least 100 ft (30.4 m) long (Barker and Clautice, 1978, p. 20, no. 33; Barker, 1981, p. 22, no. 29), interbedded with interlayered chert, shale and Mesozoic? mafic rocks in the Christian River sequence of Brosge and Reiser (1969).

Alteration:

Workings/Exploration:

Age:

Deposit model:

Lode; barite bed or lens

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

See MAS/MILS Sequence # 0020330006 (USBM, 1995)

References:

Brosge and Reiser, 1968; Brosge and Reiser, 1969; Brosge and Reiser, 1976; Barker, 1978; Barker, 1981; Barker and Clautice, 1978

Primary reference: Barker and Clautice, 1978

Reporter: J.M. Schmidt; J.H. Dover

Alaska Resource Data File Pa		Page 9
	Reporter affiliation: USGS	
	Last report date: 9/12/96	

Site: Lois Dome

Type: Occurrence

ARDF no. CO007

Latitude: 67.72 Quadrangle: CO C-3

Longitude: 142.78

Location description and accuracy:

Location plotted is locality 4 of Barker (1981, p. 33), about 1 mi (1.6 km) northeast of Lois Dome summit; located to within 2 mi (3.2 km).

Commodities:

Main: Mn Other:

Ore minerals: Psilomelane

Gangue minerals:

Geologic description:

One inch (25.4 mm) vein of psilomelane in red ferruginous argillite. Minor gold values reported in a manganiferous pebble from this same locality; Mn oxide common in heavy mineral concentrates (Barker, 1981, p.38).

Alteration:

Workings/Exploration:

Age:

Deposit model:

Lode

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

See MAS/MILS Sequence # 0020330011 (USBM, 1995)

References:

Barker and Clautice' 1978; Barker, 1981; USBM, 1995

Primary reference: Barker, 1981

Reporter: J.M. Schmidt; J.H. Dover

Reporter affiliation: USGS

Site: Rapid River bend

Type: Occurrence

ARDF no. CO008

Latitude: 67.58 Quadrangle: CO C-1

Longitude: 141.28

Location description and accuracy:

Location plotted is locality 4 of Barker (1981, p. 25). Anomalous area is approximately 1 mi (1.6 km) N-S x 2 mi (3.2 km) E-W and centered on this ridge. Does not include locations called VABM Orphan, VABM Orphan, or placer localities mentioned in Barker (1981). Located to within 1 mi (1.6 km).

Commodities:

Main: Mo, Pb, Sn, U Other: Ag, B, Be, Bi, Cu, Zn

Ore minerals: Arsenuranylite, (?) metatorbernite, uranophane, xenotime

Gangue minerals: Goethite, hematite, quartz

Geologic description:

Rubble of several phases of Old Crow batholith includes 2-mica granite, aplites and granodiorite. Area has hematite and secondary uranium minerals in quartz vein and brecia float, a radon gas anomaly, and associated rock and soil anomalies.

Alteration:

Muscovite/sericite and tourmaline are common in granodiorite/granite and aplite. Some chloritization of biotite.

Workings/Exploration:

Sample of quartz vein float contain up to 2.8 ppm Ag, >2000 ppm B, 50 ppm Be, 70 ppm Bi, 280 ppm Cu, 70 ppm Mo, 3300 ppm Pb, 300 ppm Sn, 1600 ppm U and 1500 ppm Zn. Soil samples contain up to 3100 ppm Pb, 3100 ppm Zn and 120 ppm U (Barker, 1981, p.90-95).

Age:

Deposit model:

Lode; felsic plutonic-associated Sn, Mo, U, +W and base metals, possible veins, greisens and porphyry deposits.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Barker and Clautice' 1978; Barker, 1981; USBM, 1995

Primary reference: Barker, 1981

Alaska Resource Data File Page 12 Reporter: J.M. Schmidt Reporter affiliation: USGS Last report date: 10/15/92

Site: VABM Orphan

Type: Occurrence

ARDF no. CO009

Latitude: 67.61 Quadrangle: CO C-1

Longitude: 141.22

Location description and accuracy:

Location plotted is between locality 4b of Barker (1981, p.25) and locality 2 of Barker and Clautice (1978, p. 14); north side of Rapid River in headwaters area and 3 mi (4.8 km) northwest of VABM Orphan; located to within 1 mi (1.6 km).

Commodities:

Main: Pb, Th, U Other: Cu, Zn

Ore minerals:

Gangue minerals:

Geologic description:

Soil anomalies up to 52 ppm U, 36 ppm Th, 2400 ppm Pb, 1360 ppm Zn and 120 ppm Cu, and a radiometric anomaly of 400 cps, occur in a 2400 foot x 600 foot area of tundra (Barker, 1981, p. 97-98). Nearby float is tourmaline- and muscovite-bearing aplite of the Old Crow Batholith.

Alteration:

Workings/Exploration:

Age:

Deposit model:

Lode; felsic-plutonic related U-th +Pb, Zn, Cu

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Barker and Clautice, 1978; Barker, 1981

Primary reference: Barker, 1981

Reporter: J.M. Schmidt

Reporter affiliation: USGS

Last report date: 10/15/92

Site: Rabbit Mountain

Type: Occurrence

ARDF no. CO010

Latitude: 67.48 Quadrangle: CO B-3

Longitude: 142.3

Location description and accuracy:

Located a few hundred ft. (about 100 m) west of VABM 3081 on Rabbit Mtn. midway between locality 1 of Barker (1981, p. 25) and locality 2 of Barker and Clautice (1978, p. 14); located to within 2 mi (3.2 km).

Commodities:

Main: Ag, Cu, Pb, Zn Other: Th, U

Ore minerals: chalcopyrite, galena, malachite

Gangue minerals: Pyrite

Geologic description:

Rhyolite dikes <100 feet (30.5 m) thick intrude argillite in a sequence of phyllite siltstone and quartzite. Small gossans occur in argillite; pyrite locally occurs in quartzite (Barker, 1981, p. 81).

Alteration:

Minor argillic alteration and silicification

Workings/Exploration:

Age:

Deposit model:

Polymetallic lodes (veins?) associated with rhyolite dikes

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

See MAS/MILS Sequence # 0020330008 (USBM, 1995)

References:

Grybeck, 1977; Barker, 1981; Barker and Clautice, 1978; Brosge and Reiser, 1968; USBM, 1995

Primary reference: Barker, 1981

Reporter: J.M. Schmidt

Reporter affiliation: USGS

Last report date: 10/15/92

Site: White Mountain Creek

Type: Occurrence

ARDF no. CO011

Latitude: 67.48 Quadrangle: CO B-1

Longitude: 141.16

Location description and accuracy:

Located on spur ridge about 2 mi 3.2 km) west-southwest of VABM Cone, at locality 2 of Barker (1981, p. 25); located to within 3000 ft (915 m).

Commodities:

Main: Ag, Cu, Pb Other: Zn

Ore minerals: Chalcopyrite, galena

Gangue minerals: Magnetite

Geologic description:

Mineralized (disseminated chalcopyrite and galena) float in phyllites occurs in an east-northeast trending belt 50-150 ft (15-46 m) wide by 1200 ft (366 m) long. Bedrock in the area is black phyllite and interbedded green and maroon argillite of Paleozoic? age locally intruded by porphyritic rhyolite sills and dikes, and mafic dikes (Barker, 1981, p. 64-68).

Alteration:

Silicification and propylitization of a shear zone in phyllites

Workings/Exploration:

Rock samples contain up to 47 ppm Ag, 3.3% Cu, 6600 ppm Pb and 1300 ppm Zn. Soil samples contain up to 480 ppm Cu, 1.8 ppm Ag, 530 ppm Pb and 159 ppm Zn (Barker, 1981, p. 70-74).

Age:

Deposit model:

Lode, vein?

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

See MAS/MILS Sequence # 0020330007 (USBM, 1995)

References

Barker, 1981; Barker and Clautice, 1978; USBM, 1995

Primary reference: Barker, 1981

Reporter: J.M. Schmidt

Alaska Resour	ce Data File	Page 16
	Reporter affiliation: USGS	
	Last report date: 10/15/92	

Site: Peak 2710

Type: Occurrence

ARDF no. CO012

Latitude: 67.49 Quadrangle: CO B-1

Longitude: 141.27

Location description and accuracy:

Located about 2 mi (3.2 km) southwest of hill 2710, midway between Rapid River and Sunaghun Creek, between two localities shown in Barker (1981, p.65 and 76); located to within 3000 ft (915 m).

Commodities:

Main: Cu, Zn Other: Ag, Mo, Pb, Sn, Th, U

Ore minerals: Bornite, chalcopyrite, galena, malachite, sphalerite

Gangue minerals: Magnetite, manganese oxides

Geologic description:

Locally high-grade lenses of Cu sulfides, sphalerite, galena and magnetite in thermally altered calcareous argillite intruded by rhyolite porphyry dikes and sills. Fe and Ma staining are abundant in contact zone. Mineralization can be traced 75 ft (23 m) in rubble. Nearby rocks include Paleozoic? black phyllite, maroon and green argillite, calc argillite, quartzite and limestone (Neruokpuk Fm.?), and are locally malachite or manganiferous stained (Barker, 1981, p. 64-68, 75-9).

Alteration:

Workings/Exploration:

'Manganiferous' granite contains <300 ppm Cu, 2.0% Zn, 1500 ppm Pb and 6 ppm Ag (Brosge and Reiser, 1968). Skarn with quartz, magnetite and sulfides contains 8.6% Cu, 8700 ppm Pb, 3800 ppm Zn, 43 ppm Ag. Gossan with malachite contains 8 ppm Mo, 767 ppm Sn, 102 ppm Be, 5500 ppm Cu, 1.1% Pb, 1.2% Zn, 84 ppm Ag and 160 ppm U. Hornfelsed argillite contains 55.6 ppm Th, 14.4 ppm U. Soils contain up to 290 ppm Cu, 4100 ppm Pb, 6400 ppm Zn, 0.9 ppm Ag (Barker, 1981, p. 78).

Age:

Deposit model:

Lode; hornfels and sulfide mineralization related to emplacement of rhyolite porphyry.

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

See MAS/MILS Sequence # 0020330006 (USBM, 1995)

References:

Grybeck, 1977; Brosge and Reiser, 1968; Barker, 1981; Barker and Clautice, 1978;

USBM, 1995

Primary reference: Barker, 1981

Reporter: J.M. Schmidt

Reporter affiliation: USGS

Last report date: 10/15/92

Site: Coleen River barite

Type: Occurrence

ARDF no. CO013

Latitude: 67.513 Quadrangle: CO C-3

Longitude: 142.767

Location description and accuracy:

Location plotted is for sample localities 1 and 18 of Barker (1981, p. 122) on unnamed southeast flowing tributary of Coleen River, about 6 mi (9.6 km) south of Boulder Creek junction; located to within 1000 ft (305 m).

Commodities:

Main: Ba Other: Cu, V, Zn

Ore minerals: Barite

Gangue minerals:

Geologic description:

Massive white to gray barite occurs in creek float. Minor Cu and Zn oxides coatings occur on chert float. Nearby outcrops are interlayered gabbro, argillite and chert (Christian River sequence of Brosge and Reiser, 1969) and black shale (Triassic Shublik Fm.) with abundant Fe stain, quartz veins and iron nodules (Barker, 1981, p. 121).

Alteration:

Workings/Exploration:

Mineralized chert sample contains 0.03% Cu, and 0.077% Zn. Soils contain up to 460 ppm Cu. Heavy mineral concentrate contained more than 10,000 ppm vanadium, but no gold. Mineralization extends in a band 1.5 mi (2.4 km) northeast and 1 mi (1.6 km) southeast (Barker, 1981, p. 121).

Age:

Deposit model:

Lode; barite

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Barker, 1981; Barker and Clautice, 1978

Primary reference: Barker, 1981

Reporter: J.M. Schmidt, J.H. Dover

Alaska Resource Data File Pa		Page 20
	Reporter affiliation: USGS	
	Last report date: 9/12/96	

Type: Occurrence

ARDF no. CO014

Latitude: 67.692 Quadrangle: CO C-1

Longitude: 141.283

Location description and accuracy:

Located on west side of VABM Barren, about 8 mi (12.8 km) north of Rapid River and 8 mi (12.8 km) west of Yukon border (Barker, 1981, p. 99); not the same locality as VABM Barren shown as locality 3 of Barker (1981, p. 25). Located to within 1000 ft (305 m).

Commodities:

Main: U Other:

Ore minerals:

Gangue minerals:

Geologic description:

This occurrence consists of highly fractured chloritized two-mica granite of the Old Crow Batholith, and is an area where the granite is slightly anomalous in B, Cu, Pb, Sn, U, Zn, and other minor elements (Barker, 1981, p.96).

Alteration:

Chloritic/argillic, fine-grained secondary muscovite

Workings/Exploration:

Composite sample of granite chips along 100 ft (305 m) of rubble contained 31 ppm uranium; 6 soil samples contained 15-21 ppm uranium (Barker, 1981, p. 96).

Age:

Deposit model:

Lode?

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Barker, 1981

Primary reference: Barker, 1981

Reporter: J.H. Dover

Alaska Resour	Alaska Resource Data File Page 22		
	Reporter affiliation: USGS		
	Last report date: 9/12/96		

Type: Occurrence

ARDF no. CO015

Latitude: 67.85 Quadrangle: CO D-5

Longitude: 143.46

Location description and accuracy:

Location plotted is for locality 3 of Barker (1981, p. 33) on Sheenjek River, 10 mi (16 km) upstream from confluence of Koness River; located to within 1 mi (1.6 km).

Commodities:

Main: Au Other:

Ore minerals:

Gangue minerals:

Geologic description:

Gold in placer

Alteration:

Workings/Exploration:

Age:

Deposit model:

Placer, stream

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Brosge and Reiser, 1968; Barker, 1981

Primary reference: Barker, 1981

Reporter: J.H. Dover

Reporter affiliation: USGS

Site: Procrastination Creek

Type: Occurrence

ARDF no. CO016

Latitude: 67.68 Quadrangle: CO C-3

Longitude: 142.57

Location description and accuracy:

Location plotted is locality 5 of Barker (1981, p. 33) on Procrastination Creek, near confluence with Coleen River; located to within 1 mi (1.6 km).

Commodities:

Main: Au Other:

Ore minerals:

Gangue minerals:

Geologic description:

Gold in stream placer

Alteration:

Workings/Exploration:

Several claims staked in the 1950's; traces of gold reported in rock sample nearby (Barker, 1981, p. 37).

Age:

Deposit model:

Placer, stream

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

See MAS/MILS Sequence # 0020330001 (USBM, 1995)

References

Barker, 1981; Barker and Clautice, 1978; USBM, 1995

Primary reference: Barker, 1981

Reporter: J.H. Dover

Reporter affiliation: USGS

Type: Occurrence

ARDF no. CO017

Latitude: 67.07 Quadrangle: CO

Longitude: 142.57

Location description and accuracy:

Location plotted is locality 17 of Barker and Clautice (1978, p. 14) on north side Porcupine River, about 3 mi (4.8 km) north of Burnt Paw; located to within 1 mi (1.6 km).

Commodities:

Main: Ba, Mo Other: Mn

Ore minerals:

Gangue minerals:

Geologic description:

Lower Paleozoic carbonaceous limy shales contain carbon lenses, 70 ppm molybdenum and greater than 1% barium and manganese (Barker and Clautice, 1978, p. 19, no. 17).

Alteration:

Workings/Exploration:

Age:

Deposit model:

Lode?

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Barker and Clautice, 1978

Primary reference: Barker and Clautice, 1978

Reporter: J.H. Dover

Reporter affiliation: USGS

Site: Porcupine River--Placer

Type: Occurrence

ARDF no. CO018

Latitude: 67.333 Quadrangle: CO

Longitude: 141.275

Location description and accuracy:

Location plotted is locality 3 of Barker (1981, p. 47) and 9a of Barker and Clautice (1978, p. 14), in abandoned stream drainage perched about 300 ft (91 m) above river level on south side of Porcupine River, midway between the junctions of Campbell River and Fred Creek, and about 9 mi (14.4 km) downstream from the Yukon border; located to within 1000 ft (305 m).

Commodities:

Main: Sn Other: B, Pb, Rare earth elements, W, Zn

Ore minerals: Cassiterite, scheelite, tourmaline

Gangue minerals:

Geologic description:

Placer deposit in abandoned channel now perched 100-300 ft (30.5-91.5 m) above river level; probably derived from granitic igneous rocks 10-35 mi (16-56 km) upstream in Yukon Territory (Barker and Clautice, 1978, p.19, no.9).

Alteration:

Workings/Exploration:

Panned samples contained 10,000 ppm Zn, 5000 ppm Sn, and minor tungsten (Barker, 1981, p. 117-120).

Age:

Deposit model:

Placer, stream

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

See MAS/MILS Sequence # 0020330010 (USBM, 1995)

References:

Barker and Clautice, 1978; Barker, 1981; USBM, 1995

Primary reference: Barker, 1981

Reporter: J.H. Dover

Alaska Resour	ce Data File	Page 27
	Reporter affiliation: USGS	
	Last report date: 9/12/96	

Type: Occurrence

ARDF no. CO019

Latitude: 67.36 Quadrangle: CO B-1

Longitude: 141.22

Location description and accuracy:

Location plotted is locality 4 from Barker (1981, p. 47), on north side of Porcupine River canyon about 7 mi (11.2 km) downstream from Yukon border; located to within 2 m (3.2 km).

Commodities:

Main: Zn Other:

Ore minerals:

Gangue minerals:

Geologic description:

Zinc values in carbonate breccia. Upper 10 mi (16 km) of Porcupine River within Coleen 1:250,000 quadrangle traverse geologically complex region of lower Paleozoic and(or) Precambrian dolomite, pyritic quartzite, and black shale and slate, intruded by thin mafic sills. Samples of brecciated dolomite and limestone contain silica, chalcedony, calcite, goethite, hematite, and lead and zinc minerals, and sediment samples contain anomalous lead, barium, chromium, copper, molybdenum, selenium, lanthanum, and tin.

Alteration:

Argillic

Workings/Exploration:

Age:

Deposit model:

Lode

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Barker, 1981

Primary reference: Barker, 1981

Reporter: J.H. Dover

Alaska Resource Data File Pag		Page 29
	Reporter affiliation: USGS	
	Last report date: 9/12/96	

Type: Occurrence

ARDF no. CO020

Latitude: 67.75 Quadrangle: CO D-2

Longitude: 141.95

Location description and accuracy:

Location plotted is locality 28 of Barker and Clautice (1978, p. 14) and locality 8 of Barker (1981, p. 25), about 2 mi (3.2 km) north northeast of hill 2360, in headwaters area of Dorothy Creek; located to within 3 mi (4.8 km).

Commodities:

Main: Cu Other: Ag

Ore minerals:

Gangue minerals: Quartz

Geologic description:

Quartz veins in schist reportedly contain 1500 ppm copper and 2.5 ppm silver (Barker and Clautice, 1978, p. 20, no. 28).

Alteration:

Workings/Exploration:

Age:

Deposit model:

Lode

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Barker and Clautice, 1978; Barker, 1981 **Primary reference:** Barker and Clautice, 1978

Reporter: J.H. Dover

Reporter affiliation: USGS

Type: Occurrence

ARDF no. CO021

Latitude: 67.76 Quadrangle: CO D-1

Longitude: 141.58

Location description and accuracy:

Location plotted is locality 27 of Barker and Clautice (1978, p. 14) and locality 7 of Barker (1981, p. 25), on ridge 1 mi (1.6 km) southwest of hill 2920, 12 mi (19.2 km) north-northwest of Spike Mountain; located to within 1 mi (1.6 km).

Commodities:

Main: Ba Other:

Ore minerals:

Gangue minerals:

Geologic description:

Barite veins occur in schist near contact with Old Crow granitic pluton (Barker and Clautice, 1978, p. 20, no. 27).

Alteration:

Workings/Exploration:

Age:

Deposit model:

Lode

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Barker and Clautice, 1978; Barker, 1981 **Primary reference:** Barker and Clautice, 1978

Reporter: J.H. Dover

Reporter affiliation: USGS

Type: Occurrence

ARDF no. CO022

Latitude: 67.63 Quadrangle: CO C-1

Longitude: 141.08

Location description and accuracy:

Location plotted is locality 3 of Barker and Clautice (1978, p. 14) and locality 5 of Barker (1981, p. 25), on Rapid River, about 2 mi (3.2 km) from Yukon border; located to within 1mi (1.6 km).

Commodities:

Main: Sn Other: W

Ore minerals: Cassiterite, sheelite

Gangue minerals:

Geologic description:

Stream sediments in this area contain up to 100 ppm tin and 700 ppm tungsten (Barker and Clautice, 1978, p. 18, no. 3).

Alteration:

Workings/Exploration:

Age:

Deposit model:

Placer, stream

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Barker and Clautice, 1978; Barker, 1981 **Primary reference:** Barker and Clautice, 1978

Reporter: J.H. Dover

Reporter affiliation: USGS

Type: Occurrence

ARDF no. CO023

Latitude: 67.8 Quadrangle: CO D-1

Longitude: 141.36

Location description and accuracy:

Location plotted is locality 3 of Barker and Clautice (1978, p. 14) and locality 5 of Barker (1981, p. 25), on Rapid River, about 2 mi (3.2 km) from Yukon border; located to within 1mi (1.6 km).

Commodities:

Main: Sn Other: Be, Mo

Ore minerals: Cassiterite

Gangue minerals:

Geologic description:

Strangle Woman Creek drainage generally contains cassiterite and other detrital minerals apparently derived from Old Crow granitic pluton.

Alteration:

Workings/Exploration:

Age:

Deposit model:

Placer, stream

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Barker, 1981; Barker and Clautice, 1978

Primary reference: Barker, 1981

Reporter: J.H. Dover

Reporter affiliation: USGS

Type: Occurrence

ARDF no. CO024

Latitude: 67.82 Quadrangle: CO D-1

Longitude: 141.1

Location description and accuracy:

Location plotted is locality 25 of Barker and Clautice (1978, p. 14), at head of Potato

Creek, 4 mi (6.4 km) from Yukon border; located to within 2 mi (3.2 km).

Commodities:

Main: Be, Mo Other:

Ore minerals:

Gangue minerals:

Geologic description:

Geochemical anomalies in stream sediments derived from Old Crow granitic pluton

and its contact aureole.

Alteration:

Workings/Exploration:

Age:

Deposit model:

Placer, stream

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Barker and Clautice, 1978

Primary reference: Barker and Clautice, 1978

Reporter: J.H. Dover

Reporter affiliation: USGS

Site: Rabbit Mountain north

Type: Occurrence

ARDF no. CO025

Latitude: 67.53 Quadrangle: CO C-3

Longitude: 142.3

Location description and accuracy:

Location plotted is northernmost of two localities labeled 21 in Barker and Clautice (1978, p. 14), on northern spur of Rabbit Mountain about 4.5 mi (7.2 km) north of VABM 3081 (=ARDF Record CO010); located to within 1 mi (1.6 km).

Commodities:

Main: Cu, Pb, Zn Other:

Ore minerals:

Gangue minerals:

Geologic description:

Rhyolite dikes <100 feet thick intrude argillite in a sequence of phyllite, siltstone, and quartzite. Small gossans occur in argillite; pyrite locally occurs in quartzite (Barker, 1981, p. 81-82).

Alteration:

Workings/Exploration:

Age:

Deposit model:

Polymetallic lodes (veins?) associated with rhyolite dikes

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Barker, 1981; Barker and Clautice, 1978

Primary reference: Barker, 1981

Reporter: J.H. Dover

Reporter affiliation: USGS

Type: Occurrence

ARDF no. CO026

Latitude: 67.29 Quadrangle: CO B-2

Longitude: 141.56

Location description and accuracy:

Location plotted is locality 12 of Barker and Clautice (1978, p. 14) in Upper Ramparts area of Porcupine Canyon, 2.5 mi (4 km) downstream from confluence of White Mountain Creek; located to within 1 mi (1.6 km).

Commodities:

Main: Cu, Pb Other: Ag

Ore minerals:

Gangue minerals:

Geologic description:

Anomalous base metal values characterize deformed lower Paleozoic sequence.

Alteration:

Workings/Exploration:

Up to 500 ppm copper, 200 ppm lead, and 7 ppm silver in stream sediment and rock samples.

Age:

Deposit model:

Lode

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Barker and Clautice, 1978

Primary reference: Barker and Clautice, 1978

Reporter: J.H. Dover

Reporter affiliation: USGS

Type: Occurrence

ARDF no. CO027

Latitude: 67.25 Quadrangle: CO B-2

Longitude: 141.66

Location description and accuracy:

Location plotted is locality 14 of Barker and Clautice (1978, p. 14), at Halfway Pillar, 2 mi (3.2 km) downstream from confluence of Rapid River; located to within 1 mi (1.6 km).

Commodities:

Main: Pb, rare earth elements **Other:**

Ore minerals:

Gangue minerals:

Geologic description:

Sediments in Creek draining Permian siltstone are anomalous in Pb and rare earth elements; source unknown.

Alteration:

Workings/Exploration:

Age:

Deposit model:

Lode?

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Barker and Clautice, 1978

Primary reference: Barker and Clautice, 1978

Reporter: J.H. Dover

Reporter affiliation: USGS

Type: Occurrence

ARDF no. CO028

Latitude: 67.12 Quadrangle: CO

Longitude: 141.33

Location description and accuracy:

Location plotted is locality 13 of Barker and Clautice (1978, p. 14) and shown on Fig. 1 of Brosge and Reiser (1968), at junction of major tributary of Salmon Trout River, about 10 mi. upstream from its mouth; located to within 2 mi (3.2 km).

Commodities:

Main: Ag, Zn Other:

Ore minerals:

Gangue minerals:

Geologic description:

Area is underlain by folded and thrusted, dominantly carbonate, Paleozoic rocks.

Alteration:

Workings/Exploration:

Age:

Deposit model:

Lode?

Deposit model number (After Cox and Singer, 1986 or Bliss, 1992):

Production: No **Status:** Inactive

Production notes:

Reserves:

Additional comments:

References:

Brosge and Reiser, 1968; Barker and Clautice, 1978

Primary reference: Brosge and Reiser, 1968

Reporter: J.H. Dover

Reporter affiliation: USGS

References Cited

- Barker, J.C., 1978, Mineral investigations of certain lands in the eastern Brooks Range: a summary report: U.S. Bureau of Mines Open File Report No. 63-78, 25 p.
- Barker, J.C., 1981, Mineral investigations in the Porcupine River drainage, Alaska: U.S. Bureau of Mines Open File Report No. 27-81, 189 p.
- Barker, J.C., and Clautice, K.H., 1978, Mineral reconnaissance of the Porcupine River region: a summary report: U.S. Bureau of Mines Open File Report No. 87-78, 20 p.
- Bliss, J.D, ed., 1992, Developments in deposit mineral deposit modeling: U.S. Geological Survey Bulletin 2004, 168 p.
- Brosge', W.R., and Reiser, H.N., 1968, Geochemical maps of granitic rocks, Coleen and Table Mountain quadrangles, Alaska: U.S. Geological Survey Open-File Report 323, scale 1:250,000
- Brosge', W.R., and Reiser, H.N., 1969, Preliminary geologic map of the Coleen Quadrangle, Alaska: U.S. Geological Survey Open-File Report 69-25, scale 1:250,000
- Brosge', W.R., and Reiser, H.N., 1976, Preliminary geologic and mineral resource maps (excluding petroleum), Arctic National Wildlife Range, Alaska: U.S. Geological Survey Open-File Report 76-539, 4 p., scale 1:500,000
- Cobb, E.H., 1972, Metallic mineral resources map of the Coleen quadrangle, Alaska: U.S. Geological Survey Map MF-403, scale 1:250,000
- Cox, D.P., and Singer, D.A., eds., 1986, Mineral deposit models: U.S. Geological Survey Bulletin 1992, 379 p.
- Grybeck, D., 1977, Known mineral deposits of the Brooks Range, Alaska: U.S. Geological Survey Open-File Report 77-166C, 45 p., scale 1:1,000,000
- U.S. Bureau of Mines, 1995, Spatial data extracted from the Minerals Availability System/Mineral Industry Location System (MAS/MILS): U.S. Bureau of Mines Special Publication 12-95 (CD-ROM)
- U.S. Geological Survey, 1996, Descriptions of the fields used to report brief descriptions of mines, prospects, and mineral occurrences in Alaska and Hawaii: U.S. Geological Survey Open-file Report 96-79, 5 p.
- White, M.G., 1952, Reconnaissance for radioactive deposits along the Upper Porcupine and Lower Coleen Rivers, northeastern Alaska: U.S. Geological Survey Circular 185,13 p.